

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Original): An image processing apparatus for compositing a plurality of component images into a composite image, comprising:

a separating unit that separates a codestream corresponding to each one of the component images into a header portion and a data portion, wherein said codestream is generated by dividing the corresponding one of the component images into one or more rectangular regions, transforming pixel values of the divided one or more rectangular regions with discrete wavelet transform into transform coefficients, and compressing said transform coefficients;

a header processing unit that edits said separated header portion so as to composite the component images into said composite image; and

a codestream generation unit that generates a codestream corresponding to said composite image by combining the edited headers and the separated data portions.

Claim 2 (Original): The image processing apparatus as claimed in claim 1, further comprising a composite designating unit that designates a number of the component images to be composited in said composite image;

wherein

said header processing unit edits said separated header portion based on the designated number of the component images.

Claim 3 (Original): The image processing apparatus as claimed in claim 2, wherein said composite designating unit designates at least one of the number of the component

images in horizontal directions and the number of the component images in vertical directions.

Claim 4 (Original): The image processing apparatus as claimed in claim 1, further comprising a code data processing unit that extracts predetermined code data from said separated data portion.

Claim 5 (Original): An image processing apparatus for decompositing a composite image into a plurality of component images, comprising:

a separating unit that separates a codestream corresponding to said composite image into a plurality of header portions and a plurality of data portions, wherein said codestream is generated by dividing the corresponding composite image into one or more rectangular regions, transforming pixel values of the divided one or more rectangular regions with discrete wavelet transform into transform coefficients, and compressing said transform coefficients;

a header processing unit that edits said separated header portions for a plurality of new codestreams corresponding to said component images; and

a codestream generation unit that generates the new codestreams corresponding to said component images by combining the edited headers and the corresponding separated data portions.

Claim 6 (Original): An image forming apparatus, comprising:

an image input unit that reads an image of a document;

an image compression coder unit that generates a single codestream by dividing the read image into one or more rectangular regions, transforming pixel values of the divided one

or more rectangular regions with discrete wavelet transform into transform coefficients, and compressing said transform coefficients;

the image processing apparatus as claimed in claim 1; and

a printer engine that forms an image on a recording medium based on each codestream generated by said codestream generation unit of said image processing apparatus.

Claim 7 (Currently Amended): A computer program that readable storage medium encoded with computer executable instructions which causes a computer to ~~e~~composite implement a method of compositing a plurality of component images into a composite image, comprising the steps of:

separating a codestream corresponding to each one of the component images into a header portion and a data portion, wherein said codestream is generated by dividing the corresponding one of the component images into one or more rectangular regions, transforming pixel values of the divided one or more rectangular regions with discrete wavelet transform into transform coefficients, and compressing said transform coefficients;

processing said separated header portion so as to composite the component images into said composite image; and

generating a codestream corresponding to said composite image by combining the edited headers and the separated data portions.

Claim 8 (Currently Amended): The computer program readable storage medium as claimed in claim 7, wherein the method further comprising the step of comprises designating a number of the component images to be composited in said composite image;

wherein

said separated header portion is edited based on the designated number of the component images.

Claim 9 (Currently Amended): The computer ~~program~~ readable storage medium as claimed in claim 8, wherein at least one of the number of the component images in horizontal directions and the number of the component images in vertical directions are designated.

Claim 10 (Currently Amended): The computer ~~program~~ readable storage medium as claimed in claim 7, wherein the method further comprising comprises the step of extracting predetermined code data from said separated data portion.

Claim 11 (Currently Amended): A computer ~~program that~~ readable storage medium encoded with computer executable instructions which causes a computer to ~~decompose~~ implement a method of decomposing a composite image into a plurality of component images, comprising ~~the steps of:~~:

separating a codestream corresponding to said composite image into a plurality of header portions and a plurality of data portions, wherein said codestream is generated by dividing the corresponding composite image into one or more rectangular regions, transforming pixel values of the divided one or more rectangular regions with discrete wavelet transform into transform coefficients, and compressing said transform coefficients;

editing said separated header portions for a plurality of new codestreams corresponding to said component images; and

generating the new codestreams corresponding to said component images by combining the edited headers and the corresponding separated data portions.

Claim 12 (Canceled).